SYSTEM AND METHODS FOR PROCESSING LARGE DATASETS

ABSTRACT OF THE DISCLOSURE

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In a storage area network (SAN) management application, large data sets tend to produce unwieldy and even inoperable results upon display attempts. A mechanism for gathering and organizing a large data set, such as a set of XML elements, into an ordered set of output display entries which does not require main memory storage for the entire

10   large data set, generates displayable portion in a timely manner without excessive memory consumption. Configurations of the invention employ a multiple pass gathering and organization operation. The method identifies an output criteria specifying the key field and identifies a range of entries by specifying a particular screen for display from among the full range of screens. A parser retrieves and identifies the entries, during a

15   first pass, using only the key field and an index for each of the entries in the large data set, to avoid loading all fields of each entry in entirety. A set of handlers, such as SAX callback handlers, triggered by parser events, identify entries corresponding to the display screen and identify the indices of the records for display, and perform a second pass for fetching entries only for the identified entries corresponding to the output criteria.

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